



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,662	04/27/2001	Ofir Paz	14531.107.3.	2655
47973	7590	01/11/2006		
WORKMAN NYDEGGER/MICROSOFT 1000 EAGLE GATE TOWER 60 EAST SOUTH TEMPLE SALT LAKE CITY, UT 84111			EXAMINER WONG, ALLEN C	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/744,662

Applicant(s)

PAZ ET AL.

Examiner

Allen Wong

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 36-71 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 36-65 is/are allowed.
- 6) ☒ Claim(s) 66-71 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/1/05 has been entered.

### ***Response to Arguments***

1. Applicant's arguments filed 12/1/05 have been fully read and considered but they are not persuasive.

Regarding line 25 on page 9 to line 4 on page 10 of applicant's remarks about independent claim 66, applicant asserts the combination of Azadegan and Allen do not disclose or suggest executing a program at a server, the program providing a plurality of display commands which represent a user interface for the program; drawing at least a portion of the user interface for the program on a virtual display at the server; creating a compressed video stream of the user interface by utilizing the coefficients and/or compression parameter(s) of the commands; and sending the compressed video stream to the client for remotely displaying the user interface at the client as a video stream. The examiner respectfully disagrees. In col.34, lines 19-22 and col.76, ln.16-22, Azadegan does disclose where the user can enter commands into a computer input, including a display or user interface for viewing plural commands, for executing the

Art Unit: 2613

program. Azadegan does not disclose the use of a server connected a client over a network that provides the client with remote access to a program running at the server, drawing at least a portion of the user interface for the program on a virtual display at the server, sending said compressed video stream to said client for remotely displaying the user interface at the client as a video stream as opposed to the plurality of display commands provided by the program, and receiving user input from the client that is directed to the user interface.

However, Allen's fig.2 teaches the use of a media server that is connected over communication networks with remote access at an optional remote media server for running a program at the server. Thus, Allen teaches the use of a server connected a client over a network that provides the client with remote access to a program running at the server. Then, Allen's element 204 of fig.2 discloses the drawing at least a portion of the user interface for the program on a virtual display at the server.

In col.16, ln.16-60, Allen discloses, in fig.2, the use of remote display of the user interface in that the media server stores MPEG-2 data, VIDEO CYPHER-2 and other types of compressed media, and that the compressed media and programming information can be transmitted to the subscriber. Thus, Allen sending said compressed video stream to said client for remotely displaying the user interface at the client as a video stream as opposed to the plurality of display commands provided by the program. Finally, perusal of Allen's fig.5, the subscriber or client requests for programs are sent or transmitted to the head-end to be interfaced for processing such as verifying billing and

Art Unit: 2613

transmit descrambling key to subscriber for requested programs to transmit. So thus, Allen discloses receiving user input from the client that is directed to the user interface.

The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill in the art to combine the teachings of Azadegan with Allen, as a whole, for utilizing a configurable, cost effective, efficient, flexible, precise video distribution and transmission system, as disclosed in Allen's col.10, lines 18-25.

Regarding lines 1-6 on page 12 of applicant's remarks, applicant mentions that Allen does not disclose executing a program at a server, the program providing a plurality of display commands which represents a user interface for the program; drawing at least a portion of the user interface for the program on a virtual display at the server; creating a compressed video stream from the plurality of display commands utilizing the coefficients; and sending the compressed video stream to the client for remotely displaying the user interface at the client as a video stream. The examiner does not rely on Allen alone to teach these limitations. The examiner relies on the combination of Azadegan and Allen to teach the combination of limitations disclosed. For further elaboration, peruse the above paragraphs and in the rejection below.

Regarding pages 12-14 of applicant's remarks, applicant contends that because the server interface unit and the local and remote media servers of Allen do not generate programs with display commands which represent a user interface for the program and draw at least a portion of the user interface on a virtual display at the servers, Allen cannot possibly rectify those deficiencies of Azadegan. The examiner respectfully disagrees. The examiner has already addressed the aforementioned issue in the above paragraphs and in the rejection below. And because of the stated reasons above and in the rejection below, it would have been obvious to one of ordinary skill in the art to combine the teachings of Azadegan with Allen, as a whole, for utilizing a configurable, cost effective, efficient, flexible, precise video distribution and transmission system, as disclosed in Allen's col.10, lines 18-25.

In regards to the newly amended claim 36, none of the prior art, neither Azadegan nor Allen, specifically discloses the limitation "based on the received user input from said client, sending a second compressed video stream to said client for remotely displaying a modified version of said user interface of said computer program", used together in combination with all of the other limitations of independent claim 36. Therefore, claims 36-65 are allowed.

Thus, the rejection of claims 66-71 is maintained.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2613

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 66-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azadegan (5,819,004) in view of Allen (5,892,535).

Regarding claim 66, Azadegan discloses a method of generating a compressed video stream (fig.20), comprising:

providing a plurality of display commands which represents a display (col.34, ln.19-22, and col.76, ln.16-22);

setting at least one compression parameter to different values for different ones of said display commands (col.36, ln.34-41 and fig.20, element 456, note different plural quantization values are estimated or generated based on user input commands at element 454, where a quantization value is a compression parameter; also col.7, ln.2-4, plurality of quantized coefficients are generated); and

creating a compressed video stream utilizing said at least one compression parameter for said commands (fig.20, element 462).

Azadegan does not specifically disclose the use of a server connected a client over a network that provides the client with remote access to one or more computer programs running at the server, drawing at least a portion of the user interface for the program on a virtual display at the server, sending said compressed video stream to the client for remotely displaying the user interface at the client as a video stream as opposed to the plurality of display commands provided by the program, and receiving user input from said client that is directed to the user interface.

Art Unit: 2613

However, Allen teaches the use of a server connected a client over a network that provides the client with remote access to a program running at the server (see fig.2 and note the use of a media server that is connected over communication networks with remote access at an optional remote media server for running a program at the server), drawing at least a portion of the user interface for the program on a virtual display at the server (fig.2, element 204), sending said compressed video stream to the client for remotely displaying the user interface at the client as a video stream as opposed to the plurality of display commands provided by the program (col.16, ln.16-60, note in fig.2, the use of remote display of the user interface in that the media server stores MPEG-2 data, VIDEO CYPHER-2 and other types of compressed media, and that the compressed media and programming information can be transmitted to the subscriber), and receiving user input from said client that is directed to the user interface (see fig.5 and note the subscriber or client requests for programs are sent to the head-end to be interfaced for processing such as verifying billing and transmit descrambling key to subscriber for requested programs to transmit). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Azadegan with Allen, as a whole, for utilizing a configurable, cost effective, efficient, flexible, precise video distribution and transmission system (col.10, ln.18-25).

Regarding claim 67, Azadegan discloses wherein said at least one compression parameter comprises a spatial quantization parameter (col.8, ln.40-45).



Art Unit: 2613

1. Claim 68 is rejected under 35 U.S.C. 103(a) as being unpatentable over Azadegan (5,819,004) and Allen (5,892,535) in view of Nolan (6,049,316).

Regarding claim 68, Azadegan discloses wherein said at least one compression parameter comprises a spatial quantization parameter (col.8, ln.40-45). Azadegan and Allen do not specifically disclose wherein said at least one compression parameter comprises a refresh rate. However, Nolan teaches the use of a refresh rate as a compression parameter (col.8, ln.28-34). Therefore, it would have been obvious to one of ordinary skill in the art to incorporate Nolan's teaching of the refresh rate into the teachings of Azadegan and Allen for optimizing the display monitors so as to view images at a high quality level regardless of resolution (col.13, ln.34-36).

Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Azadegan (5,819,004) and Allen (5,892,535) in view of Oyamada (5,617,333).

Regarding claim 69, Azadegan discloses wherein said at least one compression parameter comprises a spatial quantization parameter (col.8, ln.40-45). Azadegan and Allen do not specifically disclose wherein said at least one compression parameter comprises a spectral quantization parameter. However, Oyamada teaches the use of a spectral quantization parameter as a compression parameter (col.2, ln.1-5). Therefore, it would have been obvious to one of ordinary skill in the art to incorporate Oyamada's teaching of the spectral quantization parameter into the teachings of Azadegan and Allen for proper, efficient encoding of images while robustly preserving the integrity of the image data.

Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Azadegan (5,819,004) and Allen (5,892,535) in view of Tsang (5,619,591).

Regarding claim 70, Azadegan discloses wherein said at least one compression parameter comprises a spatial quantization parameter (col.8, ln.40-45). Azadegan and Allen do not specifically disclose wherein said at least one compression parameter comprises an intensity quantization parameter. However, Tsang teaches the use of an intensity quantization parameter as a compression parameter (col.4, ln.44-46). Therefore, it would have been obvious to one of ordinary skill in the art to incorporate Tsang's teaching of intensity quantization parameter into the teachings of Azadegan and Allen for accurately encoding high quality image data in an efficient manner by utilizing the least amount of data bits (col.1, ln.65 to col.2, ln.3).

Claim 71 is rejected under 35 U.S.C. 103(a) as being unpatentable over Azadegan (5,819,004) and Allen (5,892,535) in view of Kenner (6,003,030).

Regarding claim 71, Azadegan discloses the transmission of final encoded video image data to a set-top box on the receiver end of a user via television transmitter (col.11, ln.54-63). Azadegan and Allen do not specifically disclose comprising broadcasting said generated video stream to a plurality of users, using a compressed video transport stream. However, Kenner teaches the transmitting or broadcasting of the generated video stream data to a plurality of users via servers, ISPs (Internet Service Providers), MSPs (Mirror Service Providers) and delivery sites (col.7, ln.49-55

Art Unit: 2613

and fig.1 to plurality of users). Therefore, it would have been obvious to one of ordinary skill in the art to implement Kenner's teaching into the teachings of Azadegan and Allen for optimized distribution of information and video data to a plurality of users in an efficient, cost-effective manner (col.5, ln.12-14).

***Allowable Subject Matter***

1. Claims 36-65 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art does not specifically disclose the limitation "based on the received user input from said client, sending a second compressed video stream to said client for remotely displaying a modified version of said user interface of said computer program", used together in combination with all of the other limitations of independent claim 36.

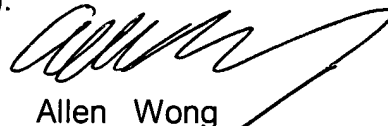
***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (571) 272-7341. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2613

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Allen Wong  
Primary Examiner  
Art Unit 2613

AW  
1/9/06